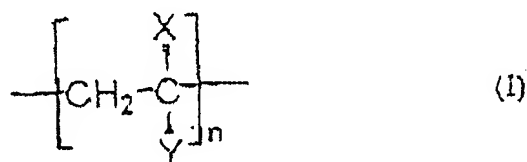


AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

1. (Currently Amended) A [[novel]] compound, or gas-associated form thereof,
for use as blood substitute or depolluting agent, ~~characterized in that it comprises~~
comprising a hemoprotein associated with a sequenced block copolymer [[comprising
a]] comprising an oligosaccharide or polysaccharide hydrophilic segment, ~~that is an~~
~~oligosaccharide or a polysaccharide,~~ covalently linked via one of its ends to a single to
~~at least one~~ hydrophobic segment of formula (I), or via each of its two ends to a
hydrophobic segment of formula I, the two hydrophobic segments being the same or
different;



in which:

[[-]] X represents H or an alkyl, CN or CONHR radical,

[[-]] Y represents a COOR', CONHR'' or C₆H₅ radical,

with R, R' and R'' representing, independently of one another, a hydrogen atom,
a linear or branched C₁ to C₂₀ alkyl group, a linear or branched C₁ to C₂₀ alkoxy group,
an amino acid radical, a mono- or polyhydroxylated acid radical or a C₅ to C₁₂ aryl or
heteroaryl radical, ~~and the forms associated with a gas~~

wherein the sequenced block polymer is formulated as a particle whose core comprises the hydrophobic segment of formula (I), and the oligosaccharide or polysaccharide hydrophilic segment lies at the surface of the particle; and

wherein the hemoprotein associates with the oligosaccharide or polysaccharide.

2. (Currently Amended) The ~~[[novel]]~~ compound of ~~as claimed in claim 1,~~ wherein ~~characterized in that~~ the hemoprotein is a normal hemoprotein, such as ~~cytochromes or myoglobins,~~ or a modified hemoprotein, in particular a natural or modified hemoglobin, that is for example bridged, polymerized, mutated or comprises more or less long peptide chains, or else a hemoprotein analogue in which the iron is substituted with another metal, for example with cobalt, magnesium, copper or zinc.

3. (Currently Amended) The compound of ~~as claimed in claim 1,~~ wherein ~~characterized in that~~ the hemoprotein is a normal or modified hemoglobin.

4. (Currently Amended) The compound of ~~as claimed in claim 1,~~ wherein ~~characterized in that,~~ in formula (I), X represents a CN radical.

5. (Currently Amended) The compound of claim 4, ~~wherein as claimed in claim 4,~~ ~~in which~~ the hydrophobic segment is a poly(alkyl cyanoacrylate).

6. (Currently Amended) The compound of claim 1, ~~wherein as claimed in claim 1,~~ ~~characterized in that~~ the hydrophilic segment that is saccharide in nature is a natural or synthetic oligosaccharide or polysaccharide, that may or may not be modified, in particular dextran, where appropriate sulfated, or heparin.

7. (Withdrawn - Currently Amended) The compound ~~as claimed in claim 1,~~
~~characterized in that of claim 1, wherein~~ X represents H and Y a phenyl or ester radical.

8. (Previously Presented) The compound as claimed in claim 1, characterized in
that it is provided in the form of particles of 1 nm to 1 mm.

9. (Original) The compound as claimed in claim 8, characterized in that it is
provided in the form of nanoparticles.

10. (Currently Amended) ~~The use of the compound as claimed in claim 9, as a~~
~~human or animal blood substitute~~ A method of therapeutically treating a human or
animal with a blood substitute comprising administering a compound of claim 1 to a
human or animal in need thereof with a therapeutically effective amount of said
compound.

11. (Withdrawn - Currently Amended) The method of claim 10, wherein said
human or animal is being further treated with an ~~use of the compound as claimed in~~
~~claim 10, as an adjuvant for antitumor composition~~[[s]] or [[other]] antitumor
therapy means, for example as a radiosensitizing agent.

12. (Withdrawn - Currently Amended) ~~The use of the compound as claimed in~~
~~claim 1, as agent for depolluting gases, such as carbon monoxide or nitric oxide~~ A
method for depolluting gases from human or animal blood comprising administering to a
human or animal in need thereof a therapeutically effective amount of the compound of
claim 1 such that, in the blood, the compound associates with the gas to be depolluted.

13. (Withdrawn - Currently Amended) A pharmaceutical composition, ~~characterized in that it contains~~ comprising a therapeutically effective amount of at least one compound as claimed in claim 1, in the form of nanoparticles in combination with a pharmaceutically acceptable vehicle.

14. (New) The compound of claim 2, wherein the normal hemoprotein is a cytochrome or a myoglobin; the modified hemoprotein is natural or modified hemoglobin that is bridged, polymerized, mutated or comprises peptide chains; and the hemoprotein analogue is an analogue in which the iron is substituted with cobalt, magnesium, copper or zinc.

15. (New) The compound of claim 6, wherein the oligosaccharide or polysaccharide is dextran or heparin.

16. (New) The compound of claim 15, wherein dextran is sulfated.

17. (New) The method of claim 11, wherein the compound is used as a radiosensitizing agent.

18. (New) The method of claim 12, wherein the gas is carbon monoxide or nitric oxide.

19. (new) A composition comprising a compound of claim 1, in the form of nanoparticles, and a vehicle.